

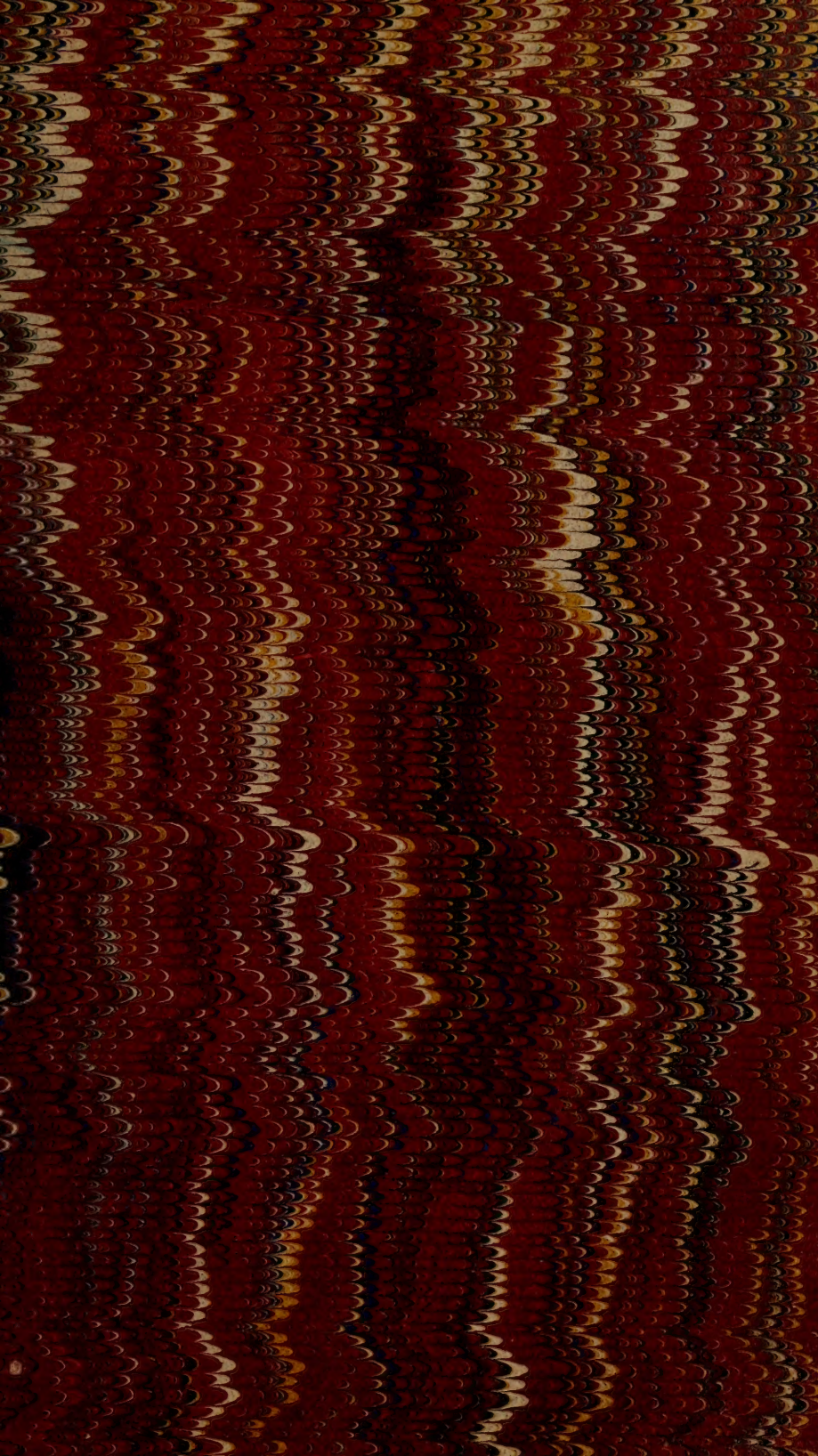
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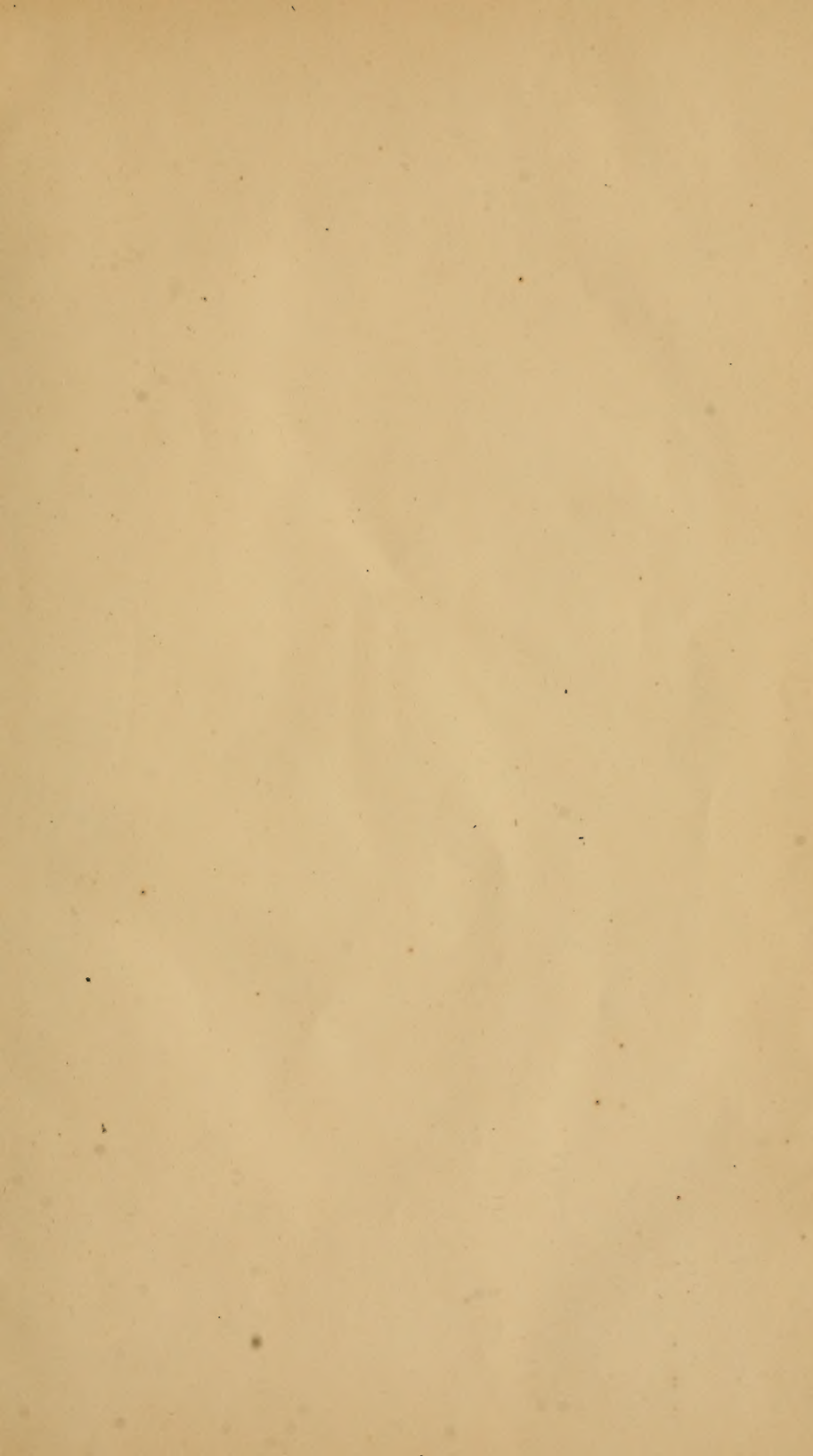
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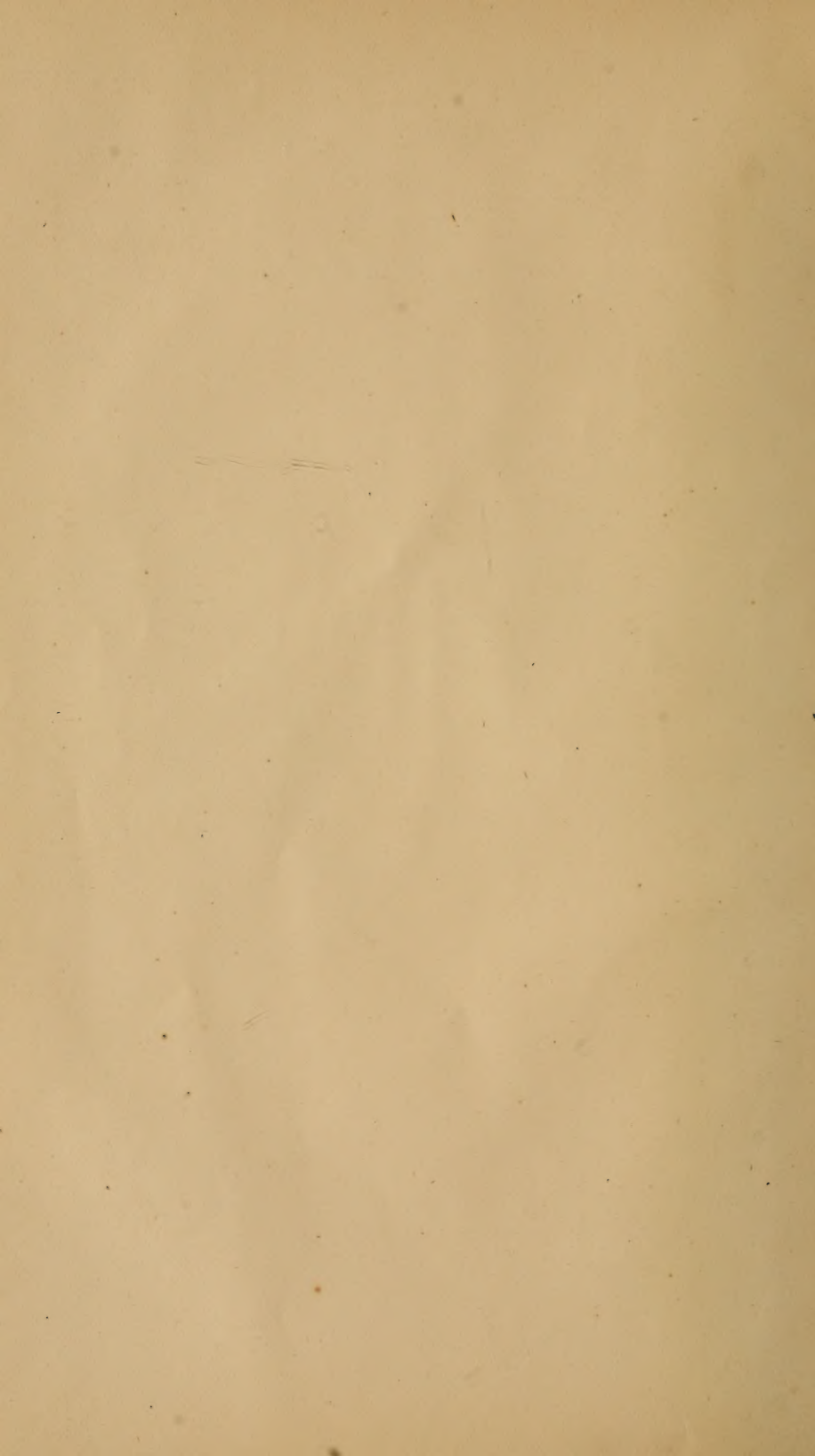
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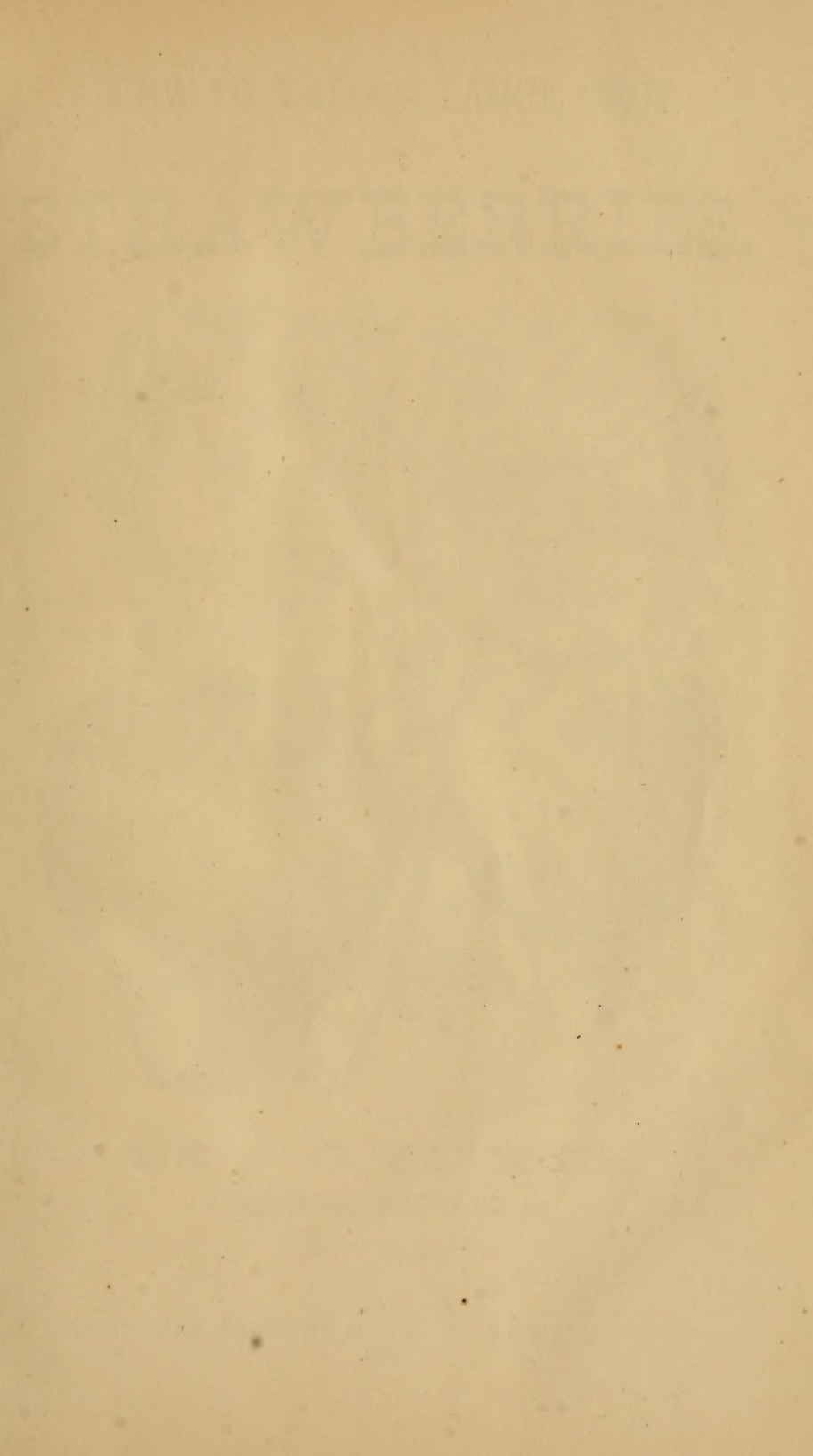
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UNITED STATES OF AMERICA.









5909

HOW TO RAISE A LARGE CROP OF STRAWBERRIES.



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WASHINGTON D.C.

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TALLMADGE, SUMMIT CO., O.

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PRELIMINARY.

IN giving to the public this treatise on the Strawberry, I am actuated by the belief, that a brief and cheap manual of this kind is much needed. And it is a cause of wonder that more persons, having much experience in raising this delicious fruit, and accustomed to writing for the public, have not before this made known their experience for the public good. Much is being said and done in, the general way, in Horticultural societies, by the discussions which are held ; as to mode of culture, varieties, and planting. But not enough stress is laid upon difference produced by different soils. These opinions are to be weighed in the scale of experience ; and where the result has been a large yield, and fine quality ; on a given space of ground ; so far as it exceeds other yields and qualities on the same sized bed, it deserves attention and a fair trial. But a mere idea or suggestion, without *facts*, amounts to nothing.

What I write is from my own observation and experience. And if my observation has been cheap, my experience has, at least in some instances, been *very dear*. These directions are not intended for those who have had more experience than I have, and who know how to proceed to raise a fine crop of berries ; but for beginners, (and there are many), and also for those who have spent time and money in their attempts and have failed, as I did for some time, all for the want of such information as will be found in this work. A book of many pages might easily be written, quoting experience of different persons and giving extracts from various authors, but this is not my design ; it is to give plain and useful directions, that all can comprehend and act upon. No one will regret the price paid for this pamphlet, if they are helped, as I think they will be, by following the directions herein contained.

THE STRAWBERRY.

In this, our beautiful country, God has given us many rare and delicious small fruits ; and of all, none excels our Strawberry. It is scattered from Maine to Florida in rich profusion. No soil refuses it a place. It adapts itself alike to the cold of the North and the heat of the South. We are attracted to it by its beauty, by its sweet perfume, and by its luscious taste. It seems to look up at us and say : “ I am in a marred and suppressed state. I have within me hidden beauties. Take of my seed ; cultivate me ; give me adaptation of soil, and I will evolve latent capabilities such as I once possessed, when perfect and beautiful, I wafted on the morning breeze my incense offering to Him who spoke me into life.” Best of all the berries, they come God’s first Spring boon of fragrance-laden fruit to man. The rich and poor alike can have them, and in their season should be on the table in every family, every meal. In eating do not destroy their medicinal qualities with cream. Plucked fresh from the vines when *fully ripe*, and eaten with or without sugar, they are an invaluable alternative to the system. Thus eaten, they will remove tartar from the teeth, and help digestion. Good ripe Strawberries eaten as above recommended, for three or four weeks, will be of more benefit to many persons than mineral waters from any spring yet discovered.

I think no person who has a plot of ground, and has once been successful in raising these berries, will be willing again to do without them, as their cost is so little in comparison with their value.

SELECTION OF A SITUATION.

We will suppose that the reader is desiring to make a strawberry-bed, and of course the first thing will be the location. Select, if possible, a plot of ground gently sloping to the south and east. Have it well exposed to the sun and air. Plant near a north and west hedge or fence if possible, as this will afford winter protection. Avoid, as much as possible, planting near trees. Putting rows of berries between rows of young fruit trees is highly recommended by some gardeners, but is not a good practice. Either trees or berries will suffer. The trees, as a general thing, absorb too much of the electricity from the air, and there is not life enough left for the berries. If you desire to prolong your berry season, select a narrow strip of ground on the north side of an east and west fence. In such a location the berry will be eight or ten days later in ripening than the same berry on a southern slope.

SELECTION AND PREPARATION OF SOIL FOR GARDEN CULTURE.

The soil is a very important consideration in this matter. For Strawberries, like all other plants require a peculiar adaptation of soil for their development; some kinds succeeding well in soil that other varieties will not do well in. This fact will be evident to any one who has ever raised vegetables or fruits. For instance: The potato requires a light, sandy soil. True, by much labor and manuring, you may raise a large crop of potatoes on clay soil, but they will be watery, and will bear no comparison to those raised in sand. The sweet potato can be raised on clay soil, but it scarcely deserves the name when cooked and placed beside those grown in sand. The water-melon raised on clay soil has none of that indescribable richness and sweetness of taste, that belongs to it, when produced in its native element, sand. So seedlings that have been originated in clay soil, will do best in clay, and vice versa. Take the wild Strawberry, with its melting sweetness and transplant into a highly cultivated garden, and it will produce little or no fruit, but hosts of runners. So the Peabody, which originated in Georgia, and considered a perpetual bearer, and good yielder there, will not produce well in a northern stimulated soil. In most gardens that have been well cultivated and manured within the last two years,

the following berries will do well: *Wilson's Seedling*, *Jucunda*, *Great Agriculturist*.

In the article headed "Selection of varieties," you will notice more on the subject.

PREPARATION.

Whatever ground you prepare for a Strawberry bed, do it right, and attend to it well after it is prepared. If you have not time or means, or room to prepare a large bed right, be content with a small plot of ground, and you will have more berries from it, well prepared and well kept, than from a large field carelessly prepared and poorly kept. Some years since a neighbor, noticing my success with berries, said to me, "Why do you not enlarge your Strawberry beds?" I told him I had not the ground prepared, and in turn asked him how much ground he had planted. He told me he had set out one-half acre. But when the fruit season came around, I had more berries from each rod of ground than he had on his half acre. He got his plants from me, *Wilson's Seedling*, and had an equal chance with myself, in every respect.

First of all in preparation, comes the drainage, and this will always pay. Do not think, because your ground is elevated or sloping, it does not require draining. I assure you, the drain will increase your yield from thirty to a hundred fold.

Two inch earthen tile drains, are the cheapest and best. Lay them two feet and a half deep and one rod apart. If you cannot obtain the tile, a drain made of brush or fine stone is better than nothing. Place the stone one foot deep and cover with ~~stone~~ ^{straw}, before covering with earth. Such a drain will last a long time. The best time for ploughing or spading the ground is in Autumn. Before ploughing, procure some old, well-rotted manure. Add to each cart load of this manure, one peck of unleached ashes, one-half peck of lime, (slack before you put on.) and one-half gallon salt. Apply a cart load of manure thus prepared to each square rod of ground. This preparation is for vines that will bear stimulating, such as *Wilson*, &c. Then plough or spade deep, and the above fertilizers will be turned under to supply life and vigor to the deep reaching roots. Before ploughing in Spring, add one half each of the Fall application of lime, salt and ashes, then spade and rake until the ground is finely pulverized. If you can procure hen manure, apply one-half bushel to each rod of ground—after spading and before raking the ground—just before planting. If you cannot prepare the ground in the Fall, do it in the Spring. But the Fall is a much better time.

If you cannot procure the well rotted manure, leaf-mold, if at hand is a verr good substitute. Do not apply fresh manures. If your ground is a stiff clay, add sand ; or if pure sand, add clay.

SEXES OF PLANTS.

The vexed question of sexes, in plants is still on the tapis. The Strawberry comes in for its share of the dispute, and for the want of knowledge on this subject, much time and labor has been lost ; and here, a rich experience of my own comes in. Some years ago, with the help of a gardner and much hard labor on my own part, I succeeded in laying out and planting a beautiful Strawberry bed. When in blossom, it was the wonder of all beholders, and my neighbors predicted several bushels at least, of fine fruit. With what joy I looked upon its snowy bloom ! the large, glossy leaves nearly hidden with the white profussion. But when the time to gather berries came—alas for the berries ! I had the whole amount of *three quarts* ! I attributed my failure to the fact that the plants were too near together, and I then removed about half of them. The next year they bloomed out again grandly, and I had again three quarts of berries ! And the result was my berries cost me about five dollars a quart. All this loss of time, labor and money, was owing to my ignorance of the difference between male and female flower, which you now know. There are three kinds of plants : Pistillate, Staminate and Hermaphrodite.



EXPLANATION OF CUT.

LETTER A.—Hermaphrodite, or pefect flower, having stameus and pistils (male and female) on same. S.—Staminate. P.—Pistillate.

LETTER B.—A staminate or male flower.

LETTER C.—A pistillate or female flower.

Supposing you set out a bed of Hovey's seedlings. These being pistillate plants require a staminate, Burr's New Pine for instance, near them. Set out seven or eight rows of Hovey then one row of Pine.—

On the other hand, the Wilson being a hermaphrodite, contains both stamens and pistils in one plant, and needs no staminate or pistillate near it.

The hermaphrodites are coming into very general use, and will soon supercede all the old kinds, being much less trouble. Before procuring any plants, besure you undersand whether they are Staminate, Pistillate or Hermophrodite. And also be sure to obtain young plants.—Old ones are not worth the trouble of setting out.

SELECTION OF VARIETIES.

On selecting plants, no very specific directions can be given to each one, for all must be guided by their soil. For, as has been stated, plants that will succeed well in one locality and soil, may not do well in a different soil. For instance, I will name two kinds that are well known, Willson's Seedling and Hovey's seedling. The Wilson Seedling is a vigorous grower, and will produce largely in sand soil. But the berries will be small, more acid, of a dull, dark red, with seeds protruding out, so that you can feel them with the hand. While the same berry on a rich, clay loam, produced for me, on a bed *forty-seven by forty feet, eighteen bushels and nine quarts of fine flavored berries*. Many of these berries measured from *three and a half to four and a half inches*, some *five inches* in circumference, and very few small ones.

The Hovey Seedling, on the same ground the same year, would have given me but few berries, and an innumerable host of runners. Therefore, for a rich clay loam, they have yet to find the berry that will compare with the Wilson for quantity and quality. It has been denounced by some garderners and amateurs, as being too acid. This is owing to the fact that it was not raised in congenial soil, or was not ripe. Where the soil is adapted to it, and it is fully ripe, it has just acid enough to make it pleasant.

As an evidence of the general satisfaction this berry gives, I had growing in the same garden the same year, with the same care, Longworth's Prolific, Hovey's Seedling, Hooker's Seedling, Early Scarlet, Hout Boy, Burrs New Pine, Alice Maud, Peabody's Seedling, &c. Yet when our customers came for berries, eight out of ten would say "give me the Wilson." They are especially desirable for canning, as they retain so well their flavor and form. Every person cultivating for their own use, would do well to obtain a few plants of several different kinds and try for themselves. From my experience I would recommend the following :

For sand soil, Early May, Burr's New Pine, Hovey's Seedling, Great Wisconsin, Lady of the Lake, Triomphe de Grand.

For clay soil, Wilson's Seedling, French's Seedling, Great Agriculturist, (late) Russell's Prolific, Lennig's White, Jucunda.

The Jucunda was imported from Belgium, by B. M. Watson, old Colony Nurseries, of Plymouth Mass. It is recommended as one of the choicest berries. I am not personally acquainted with Mr. Watson, but have made small purchases from him, at different times, of shrubs and plants, and always to my satisfaction. The plants have come done up in gutta percha silk, all in good order—every one grew. You can rely upon receiving genuine plants from him.

By sending to him, you can obtain free, a full catalogue of choice seeds and plants. He recommends for general cultivation, the following fine new varieties :

Jucunda, Lady of the Lake, New Jersey Scarlet, Early May, River's Eliza, French's Seedling, Chas. Downing.

He says of the Chas. Downing, "Twenty-eight berries gathered in June, from a bed set last Autumn, weighed one pound." Again I would say, try different kinds, until you find what succeeds best in your garden.

PLANTING--WHEN AND HOW.

Spring is decidedly the time to set out Strawberry plants. Fall planting is highly recommended by some fruit growers, especially the month of August, but I could never see any reason why. For in this climate, we often have a long and dry season through August and September; and Strawberries can not live without plenty of water. And if they are not well rooted before the cold weather comes on, they will not stand our winters. Planted in Spring, they will be sure to catch the rain during some of the early summer months. And although you cannot expect or have much of a crop (see cultivation) the first summer, the plants will have attained such a growth and strength by the next, as to fully repay the waiting.

I strongly recommend Spring planting. Before setting out the plants, procure some old, well-rotted sawdust. *Be sure and get the old sawdust.* It will pay to haul it five or ten miles. If it cannot possibly be obtained; the next best thing is old, fine tan-bark. Leaf mold is also good. After the ground has been spaded and raked over in the Spring, let it settle a few days before setting out the plants. If the ground is low and has not been drained, elevate the bed slightly, about

three inches. Keep the ground in the bed level. With a spade dig holes in rows, two feet apart, ten inches deep and fifteen inches apart in the rows. Then take the plants in a shallow basket or pan, and in another old pan or coal-bucket, as much sawdust as you can conveniently carry with you. Put in the bottom of each hole a trowel ful of the old sawdust. If dry, pour in a pint or so of water. If the roots are matted together and dry, dip them in water. You will find this especially beneficial, when the plants have been received from a distance.

Hold the crown of the plant between the first finger and thumb of left hand, dividing the roots between the other three fingers, and be particular to set the plants in the ground, with the crown just even with the surrounding earth. Then, with the trowel in the right hand draw some dirt over the sawdust and around the roots, until within three inches of the level ground. Then put in again a little saw dust, and finally fill to the level with dirt. Put no saw dust on top of the ground, near the plant. Then drop your trowel and with both hands press the earth inward, towards the crown, until the earth is compact, and then press all gently down. Start with the crown well down as it is much easier to elevate itslightly, when partly filled in, than to crowd down.

Gardens are sometimes infested with ground moles, that plough through Strawberry beds and disturb the roots. I noticed that no moles ever worked in my onion bed, so I took up the idea that onions would keep them from Strawberry beds. I tried it, and the moles took their departure. Cut the onion and place half in each opening, when you set a plant. Place the half onion two inches from the plant and two inches from the surface—turn the growing side down. Many persons have in the spring onions that have sprouted—unfit for the table. If you have such on hand, place one between each plant in the rows three inches under ground, root side up. The ammonia of the onion will drive the mole away and increase the yield of fruit.

Now you have a bed, after my plan, for producing the greatest yield of good fruit on a small piece of ground.

RUNNERS.

The Strawberry has two ways to produce its like—by seeds and by runners. If the soil is right, the first effort will be to set the fruit; Next to perpetuate its like by runners.²²

The first runners you will notice, be spindling, not much thicker

than a large knitting needle. Remove all such runners, and in order not to injure the plant, take hold of it with one hand and with the other jerk the runner downward; separating it as near the plant as possible. Keep off all the runners that make their appearance after the fruit season, for three or four weeks, until the plants send out vigorous runners, three or four times the size of the first set. Let these strong runners cover if possible every part of the bed. If the season be dry, runners will not readily take hold of the soil, and will need a little of your assistance. Where they throw out the first leaves, after leaving the parent stalk, hollow out a little place, like bowl of a spoon, set the little fibrous roots in it, draw some earth over them, and hold the runner in its place by a small stone or weight of any kind, not to exceed the size of half an egg, placed close to the runner, on the side towards the mother plant. A twofold object is gained by allowing these vigorous runners to thus cover the bed. First, they afford in a great degree their own winter protection. Secondly, they serve during the fruiting season as a shield to the ground, retaining the moisture and protecting the fruit from the fierce rays of the sun. I am aware they need air and light; thus treated they will have an abundance. In gathering berries, you will always find that the choicest ones are those that have been slightly shaded.

Again I say, attend to the recommendations about the runners. I attribute, in a great degree, my success in the large yield (advertised in the *New York Tribune*) to having strictly attended to this matter.

See article on blackberry and also cultivation in hills, about removing all the fruit stalks from every plant, unless you want one or two to show the size and quality of any new kind you may plant.

WATERING.

Strawberry plants *must* have water. They delight in it, and if the land is well *drained*, can scarcely have too much of it. I do not mean to have them standing in stagnant water. They will not like that any better than corn would. But if convenient, have the beds near running water, so that in a dry season it can be thrown upon them abundantly. Sundown is the best time for watering, but they will like two drinks a day; morning and night. Our best crops have always been gathered when we have had wet weather through May and June. If there comes a dry time through the fruiting season, and you desire a good crop of berries, water thoroughly and often, early and late. Give

them a bucket full to every three or four feet. They will show you how well they like it. They will return thanks by giving you nice berries and plenty of them.

GARDEN CULTIVATION.

If the ground has been well prepared, and the plants set in it according to direction, the hardest labor is done, unless we except gathering the berries.

Many people spoil their beds by too much cultivation. After preparing the ground carelessly and *throwing* in the plants, in a slovenly way, they commence a vigorous hoeing, which is certain death to the numerous fibrous roots, which interlace and fill the ground around the plant. A hoe should never be used near a Strawberry plant.—A gentleman living near me, who always has a good garden, complains to me that, although he succeeded with every thing else, he could not raise Strawberries. As he is a very thorough gardner I inquired, “Do you hoe your beds?” “Oh, yes, I hoe them thoroughly and often,” he replied. Here was his mistake.

Weeds will grow in strawberry beds, as well as every where else: and of course *must come out*. Those immediately around the plant must be pulled out by hand. Those between the rows can be exterminated by a careful use of the hoe. Do not let your hoe come within six inches of the plant, and be careful not to ridge up the ground, but keep perfectly level. You will need to go over the ground in this way two or three times. But after the runners are well set, lay aside your hoe, and never let one be used again in the patch, as long as it is used for a strawberry bed. Great care should be used in gathering fruit not to trample down the ground close around the plant. If after thus carefully removing all weeds and grass, an occasional weed makes its appearance, it must be removed by hand. Later in the season your bed will require a slight covering of clean straw or dried leaves which will be more particularly spoken of under “Winter protection.” If your soil is a clay loam—not sand soil—some time during the month of May, or before the fruiting season, when the leaves are dry. Apply for every rod of ground about one quart of common salt—sow it broadcast over the bed. Also just before the fruiting season—when the ground is wet—apply to each rod of ground one peck of hen manure, dissolved in a half bbl. of water, just before the dew falls.

REMOVALS OF BEDS.

It is better to take strong healthy runners, and make new beds once in three or four years, than to try to keep up the old and you will have better fruit with less trouble; as it requires some skill, and much work to keep down the runners in an old bed. The field cultivator has only to let the runners set between the old rows; turn the old rows under with his cultivator, thin out the new rows, and the work is done.

CULTIVATING IN HILLS.

If you wish to try this mode of culture; set the plants twenty inches apart each way. Prepare the ground as directed, and after having destroyed the first and second crops of weeds, carefully with the hoe pulling all weeds near the plant with the hand, cover the spaces between the plants, two inches deep with straw. Place the straw only half an inch deep, immediately around the plant. If no straw can be got, use well rotted tan bark, for surface covering. It some times causes mildew, if over $\frac{1}{2}$ inch in depth immediately around the plants and it will cause many roots to run near the surface, that can neither stand the drought of Autumn, or the frosts of Winter. Plants set in the spring, will always if the season be favorable produce more or less berries. After the fruit is set and the first berry turns red, remove every fruit stalk. It will seem hard, and like a waste, to throw away that, which in a few days would afford a dainty meal. But, I think for every quart thus sacrificed, you will gain ten quarts the next season; if it prove a propitious one for berries. You ask, why not remove the fruit stalks, as soon as they make their appearance. One reason is, a second effort will be made to produce fruit, which will exhaust the plant.—Next there will be an effort to send out runners, which will also exhaust the plant. These must all be removed as soon as two or three inches long. Soon the plant thus treated will commence stooling out, until a single plant, will have the appearance of a dozen pressed together. I had a bed of Wilson's Seedling after the above plan set out in the Spring of 1862; only I had the plants thirty inches apart. The plants treated as above directed stooled out, until each single plant, in the month of June 1863, covered a space larger than the head of a flour barrel. The leaves of the plants touched each other in the rows. Every plant on the bed, was loaded

with hundreds of berries. There were counted on one single plant, three hundred and eighty four perfect berries. Many other plants in the same row were nearly as full. Many of the berries were of a large size, but not on an average as large as those raised on the beds, as previously described.

Let not the reader think that hill culture implies any elevation of earth around the plant. If the ground is flat let the bed be elevated about three inches, but always keep the ground level between the plants. A small bed thus treated will for the sight of it alone, independent of the berries, pay for the labour. But I do not recommend this mode of culture. The berries thus raised are more affected by drought. They will prematurely turn the color of ripeness. They will not have the same rich color and delicious flavor. And they will not on an average be of as good size, as the same berries, raised in the same garden, the same season; treated as first directed.

WINTER PROTECTION.

My berries had no winter protection the season referred to, when I had the unprecedented yield of Wilson Seedlings, save that afforded by a fence on the north and west, about fifteen feet distant from the beds. In most localities, you will find it a great advantage to give the beds in your garden winter protection; and it is especially recommended for the open field culture. If you neglect it, you may find half of your thrifty plants lying on top of the ground, in the spring. To protect them well, first procure an ample amount of small brush, and scatter them all over the bed, laying the tip ends, instead of the butt ends of the brush on the plants. Then cover the beds all over with straw, two inches thick; taking care that each plant have a slight covering over it. Then cross-wise of the bed, place a few long light brush, to keep the wind from carrying away the straw. Be careful not to remove the covering too early in the spring. Persons having beds thus protected, on the appearance of the first warm days in March or April, remove all the covering at once. The plants having thus been protected, are tender and cannot stand the chilly winds that follow, nor the bright sun light. When the weather becomes warm and settled, then remove the covering by degrees. Leave part of the straw where there are open spaces, and also under the leaves around each plant, first taking out with the hand, all weeds. The straw thus left, will keep the earth moist, around the plant; and keep the fruit from being splashed and soiled during hard rains.

FIELD CULTURE.

You must proceed in selection of location, same as for garden culture as far as practicable. Draining here is essential, as in the garden.—Never select ground in which the grass has not been subdued, by at least two years tillage with other crops. If you have a piece of ground that has been in corn or potatoes the two preceeding years, select such a lot for your straw-berries. You will then have but little trouble to keep down the weeds. If the ground is rich enough to bring a good crop of corn, it will without any additional manuring produce a good crop of strawberries. If the soil is not in a high state of cultivation, apply from ten to fifteen wagon loads of well rotted manure, fifteen bushels of ashes, fifteen bushel of slacked lime, and three bushels of salt to each acre of ground. If muck soil is convenient it will be a good substitute for the manure; and a much better one still if it can be had, you will find in leaf mold. Let the reader remember that the above mode is submitted for those strawberries, and those alone, as will bear and seem to require much stimulation. If you have ground lately cleared, that has been tilled, you will find in such soil, most if not all the prerequisites to bring a large yield of strawberries. Such ground will not require any of the fertilizers above named; but the lime, and not that, if the substrata rocks of the field are limestone. If your land is a clay loam, and does not abound in small sandstone, you will improve it very much, to scatter over each acre, fifteen to twenty wagon loads of river or creek sand. It will prove ultimately of more benefit to such land, for producing most any crop, than five times that number of loads of manure. On the other hand, if your soil is silica, or in other words what is termed strictly a sand soil, you can improve it vastly, by applying twenty or thirty wagon loads of clay to the acre. Put it on late in the fall, and the frosts will pulverize it, and then in the spring before ploughing; add to such soil, ten bushels of lime, ten bushel ashes to the acre. Your ground will then bring you a good crop of berries, and when done with berries, will be in good condition for other crops. After having the ground ploughed deep, (and do not plough until in a good condition to plough) let it thoroughly dry, so that the earth will almost pulverize at the touch of the hand. If the weather is settled and clear; let the ground remain one or two days after ploughing, before harrowing. Then mark it out with a corn marker—the rows four feet apart. Place in the centre of the marker, a small peg, that will leave a mark, where the middle row of berries are to be set. Having the ground thus marked, set the plants in these rows, between the space of the four feet. The middle row will be two feet distant

from the four foot marks, one foot each, leaving a space of two feet, between the rows of plants. Set the plants one foot apart in the rows.— You will then have a space of two feet between the rows, through which you can pass with a one horse cultivator, to keep down all the weeds. Keep all the ground as level as possible. Let the ground be well settled before planting; and plant in the spring, even if late. It is better than fall planting. You may if you have strawberry beds close by, of the kind you wish to plant, transplant the vines at almost any time of the year, by using great care; taking up with a garden trowel, some of the soil, with the plant and drenching with abundance of water. Taken up in this way, the plant will grow, unless it be the fruiting season, but early spring planting is the best; for reasons previously given. In our latitude, forty-one and a half, we set out plants in April, and on to May 25th. In your field, as in garden culture you must use the hoe very carefully. Do not disturb the earth, close around the plant. All weeds near the plant, must be removed by hand, and as directed in garden culture, remove all fruit stalks that make their appearance the first year; but not until the berries are formed. Then in a short time the runners will make their appearance. Remove every one, as heretofore directed, until the plant can, and *will* send out vigorous runners, and not exhaust itself. When the stout large runners make their appearance, prepare for them, the two feet of vacant ground, making it as clean and level as possible. When some of the large runners, reach out upon the vacant ground, lay them close to the outer row, that you do not injure them. When going over the space for the last time, any that have commenced to throw out little fibrous roots, you can help as recommended in garden culture. If your ground is right, these vigorous runners will cover nearly every vacant spot. And in one year from setting out, if the season is a good one for berries, you will have such a yield, as no other mode of culture ever has, or can produce, on the same sized lot of ground. In the second season, let the three original rows of plants, set the fruit, but not send out any runners. Remove every one; and also the first weak runners, that come out from the runners, which were set the year before. The third year, turn under the original or first rows that you set out, with your cultivator. They will enrich the ground faster and better, than turned down clover will for the wheat field. When turned down the third year, apply some good fertilizer.

TRANSPORTATION.

A few years ago a great trouble, with the grower of small fruits, was the shipping. After he had secured a fine crop, unless being near the

city, he was at a loss how to dispose of it. But at the present day, with all our network of railroads; and our factories throughout the country for making convenient little fruit baskets and boxes, on purpose for small berries; it is considered no great feat to ship berries four or five hundred miles, in a good condition.

Information concerning these baskets and boxes, best kinds, and where obtained, can be had by addressing Secretary of Farmers' Club, New York Tribune. I do not wish to recommend any particular kind as improvements are constantly being made.

Some kinds of berries bear transportation much better than others, and great regard should be paid to this, by those field cultivators who live at a distance from the market. The following berries bear transportation well:

Wilson's seedling, Jucunda, Triomphe De Grand, New Jersey Scarlet and French's Seedling. Other varieties will bear transportation well. For further description of varieties of berries, see page and prices. I quote from catalogue of B. M. Watson, Old Colony Nurseries, Plymouth, Mass., from whom you can order. I have no plants to sell at present.

FINE AMERICAN STRAWBERRIES.

By mail, prepaid, at the dozen price. Hundreds prepaid by mail for 25 cts. per 100, additional.

Plants should be set in September and October; and for spring planting, in April and May. Those set in October give a fine crop in the spring ensuing.

Strawberry plants for the mail are packed in gutta-percha silk, and may be sent in perfect safety any distance.

The following are selected from upwards of a hundred and fifty sorts which have been tested in this Nursery, and are confidently offered as the best now in cultivation.—They have taken all the principal prizes at the great strawberry shows this season.—Several new kinds are now offered for the first time.

NEW STRAWBERRIES.

ABRAHAM LINCOLN.—A new seedling grown in Pennsylvania, of very large size; productive and of excellent quality. 25 cts. each; \$2 per doz.

CHARLES DOWNING.—This fine fruit was obtained from Downer's Prolific, by Mr. J. S. Downer of Kentucky. It is a rich scarlet, of the largest size, very firm and solid, and of a rich and peculiar flavor. The plant is of extraordinary vigor and productiveness. The flowers are perfect. 28 berries gathered in June, from a bed set last autumn, weighed one pound. This is no doubt one of the best fruits ever introduced. By a special arrangement with Mr. Carpenter, who owns the stock and is sending it out this season *for the first time*, I am able to offer this splendid strawberry to my customers at his prices viz.: 3 plants, \$2; 6 plants, \$3; 12 plants, \$5; 100 plants, \$25.

DURAND'S SEEDLING.—A new early fruit, remains long in bearing; uniformly large; very solid; of excellent flavor, and high perfume. Extra. \$2 per doz.

GREAT AGRICULTURALIST.—This splendid fruit is one of the finest ever grown in this country. Its great size and beauty and heavy yield will make it a universal favorite. The fruit is uniformly large and handsome. This strawberry is *the latest* fruiting variety ever grown, adding a week or ten days to the strawberry season.—This makes it a market sort of the very first importance. It was in bearing here this season at least ten days after all other kinds were done. 50 cts. per doz.; \$2 per 100; \$15 per 1,000.

GREAT RIPAWA.—A new and very large fruit of great beauty; originated in Connecticut. It took the first premium at the American Institute, New York, being the largest and heaviest berry ever shown. This promises to be one of the leading sorts. \$1 per doz.; \$5 per 100.

- HARRISON.**—A new fruit from near New York, resembling Hovey's Seedling in size and quality; very productive, and firm. 20 cts. each; \$2 per doz.
- JUCUNDA, or KNOX'S 700.**—I imported this fruit from Belgium some years ago, and it turns out to be one of the most remarkable strawberries in cultivation. For brilliant color, perfect form, extreme beauty, enormous productiveness, large and uniform size, and protracted fruitage, it excels all strawberries now grown. \$1 per doz.; \$6 per 100.
- LADY OF THE LAKE.**—A new strawberry originated by Scott Brothers, and sent out for the first time last season. This is a fruit of the first class, and I confidently recommend it for private gardens and for the market.
- The berry is very large, rich scarlet, of regular shape, firm, and easily gathered, of a high aromatic flavor. A fruit of the highest excellence. 75 cts. per doz.; \$4 per 100.
- METCALF.**—A new and very productive sort, of great beauty; fruit very solid, of a bright scarlet color; plant hardy and vigorous. \$2 per doz.
- NEW JERSEY SCARLET.**—This is the earliest of the new strawberries, and with the exception of *Early May*, the earliest known. The fruit is large, bright scarlet, very sweet and firm. It is a fine grower, and I can recommend it after thorough trial as a fruit of the best quality. From its extreme earliness, it is a very desirable sort for market gardeners. 50 cts. per doz.; \$2.50 per 100.
- PERPETUAL PINE (GLOEDE).**—This new foreign pine is received from Mr. Gloede of Belgium, who thus describes it:—
- "The kind I have the good luck to offer is a real, perpetual, large-fruited strawberry, of the pine class, which, during three years' culture, not only bore an abundant crop in spring, but continued flowering and fruiting till late in the autumn."
- Plants \$1 each; 6 for \$3; 12 for \$5.
- PHILADELPHIA.**—For an early variety this is no doubt one of the best. The fruit is large and firm, of a conical form, rich scarlet; a most abundant bearer of unsurpassed flavor. It has received the first premium of the Pennsylvania Horticultural Society. \$1 per doz.; \$6 per 100.
- PRESIDENT.**—A new and superb fruit, of large size; very beautiful, and of delicious flavor. Extra. 25 cts. each; \$2 per doz.
- ROMEYN.**—This new seedling, as firm and productive as the Wilson, continues to fruit very late. A very showy and attractive berry. \$1 per doz.
- STARR.**—New, very productive; of a peculiar and agreeable aroma; a splendid fruit. 25 cts. each; \$2 per doz.
- STINGER.**—A very large solid fruit; of great beauty. Its enormous size will make it one of the leading sorts either for the market or garden. \$2 per doz.

THE BEST STANDARD STRAWBERRIES.

- BIJOU DES FRAISES.**—The best of the Hautbois varieties, and combining all the peculiar merits of the Alpine, Wood and Hautbois tribe. Its peculiar musky aroma, and delicious flavor, will commend it to all admirers of this unique class of strawberries. In consequence of its superiority in size and quality over all other varieties, I have discontinued in its favor the cultivation of the other sorts offered in former Catalogues. 50 cts. per doz.; \$2 per 100.
- BONTE DE ST. JULIEN.**—A foreign Pine of great productiveness, very sweet and delicious. An excellent sort. 50 cts per doz.; \$3 per 100.
- BOSTON PINE or BARTLETT (HOVEY).**—A large, hardy, and productive sort, of most excellent quality. It is a very rich and sweet fruit, and among the earliest ripe. The berries are firm and easily gathered,—a first class fruit for the family use or the market. Extra. 25 cts. per doz.; \$1.50 per 100.

- BRIGHTON PINE (SCOTT).**—This, and the foregoing are remarkable for their rich, sweet, and highly flavored fruit, which makes them particularly desirable for family gardens. In quality they resemble the English and Belgium Pines. Extra. 25 cts. per doz.; \$1.50 per 100.
- BUFFALO SEEDLING, or GREAT BUFFALO (SMITH). P.**—This new sort is thought to be more productive than Wilson's Albany, and several experienced growers have given testimonials to the effect that it is superior to any other sort now in cultivation. Fruit large; color dark crimson; flesh solid, with a sweet aromatic flavor. 50 cts. per doz.; \$2 per 100; \$15 per 1000.
- BYBERRY SEEDLING.**—An excellent grower; berry large, dark scarlet. A new sort highly recommended. 50 cts. per doz.
- CUTTER or BUNCE.**—An excellent strawberry, of the best quality, very productive, and remains in bearing a long time. The fruit is large, handsome and easily gathered; a first-rate fruit for the garden or market. Extra. 25 cts. per doz.; \$1.50 per 100.
- DOWNER'S PROLIFIC or DOWNER.**—This has proved a first class market berry, ripening with the earliest, and holding out very late. The fruit is large and handsome, of excellent flavor and very productive. The plant is very hardy. I would recommend this excellent sort to all planters, whether for the market or private use. Extra. 25 cts. per doz.; \$1.50 per 100.
- EARLY MAY.**—Extra large and productive. A beautiful, high-flavored fruit, which should be in every garden, on account of its extreme earliness and productiveness. Extra. 25 cts. per doz.; \$1.50 per 100.
- ELIZA (RIVERS).**—A most delicious fruit, which I received some years since from Mr. Rivers of England, the famous nurseryman who originated it. It is by far the best and most productive Pine in cultivation, and is unsurpassed in quality by any strawberry I am acquainted with. The fruit is very large, dark crimson, very juicy, sweet and rich, sprightly and perfumed. The plant is hardy, vigorous and prolific. I would recommend it to all planters in preference to any other Pine. Extra. 50 cts. per doz.; \$3 per 100.
- FRENCH'S SEEDLING.**—This new and excellent variety has fully maintained its character for earliness, large size, and productiveness. It may be relied on as one of the earliest and very best sorts for the market or private garden. New. Extra. 50 cents per doz., \$2 per 100; \$15 per 1,000.
- GOLDEN QUEEN.**—A beautiful berry from Western New York. A most productive and valuable fruit. \$1 per doz.
- GREAT WISCONSIN, OR WISCONSIN PERPETUAL.**—This new variety originated in Watertown (Wis.), and is remarkable for its high flavor and heavy yield. It remains a long time in fruit, under favorable circumstances. The flowers are perfect and fruit stems erect. The plant is very vigorous and hardy. New. \$1 per doz.
- GREAT PROLIFIC. P. (BOYDEN)**—This is one of the parents of the "Agriculturist." The plant is very hardy and vigorous; the fruit large, uniform, orange scarlet, high-flavored, solid, parts easily from the stem; fruit stems erect; and is most productive. New; 50 cts. per doz.—\$2 per 100.
- HOVEY'S SEEDLING. P.**—This old and well-known sort is a great favorite in many parts of the country. It must be planted in the neighborhood of the Boston or Brighton Pine to produce full crops, as its flowers are imperfect. 25 cents per doz.; \$1.50 per 100.
- IDA.**—Strong, hardy, and rapid grower. Fruit large, bright scarlet, and of excellent flavor. Exceedingly productive, and promises to be one of the very best sorts for the market. 50 cents per doz., \$2.50 per 100.
- JENNY LIND.**—One of the earliest and most delicious sorts known. The fruit is conical, very sweet, very early, and remains a long time in perfection. It should be in every garden. Extra. 25 cents per doz., \$1.50 per 100.

- LA CONSTANT (DE JONGHE).**—This is a first class Pine, of beautiful shape (a regular cone), very large, bright crimson. The flesh is rosy, sweet, and of exquisite flavor. The plant is very vigorous and productive. New. Extra. 50 cts per doz., \$3 per 100.
- LEED'S PROLIFIC.**—This new and fine variety resembles the Early Scarlet, but is much larger, and a very early and productive sort, bearing at the rate of 200 bushels per acre. It has been fully tested in New Jersey, where it originated, and proves to be one of the best and most profitable sorts in cultivation. New. 50 cts per doz., \$2 per 100.
- LENNIG'S WHITE, OR WHITE PINE APPLE.**—Very large, round, white with pink tinge, buttery, high-flavored, excellent. 75 cts per doz., \$3 per 100
- RUSSEL'S GREAT PROLIFIC. P.**—This is an extremely large and wonderfully productive fruit, of fine appearance, and of a peculiar and very agreeable aromatic flavor. This splendid strawberry attracts much attention, and is a great acquisition. New. Extra. 50 cts per doz., \$2 per 100; \$15 per 1,000.
- TRIOMPH DE GAND.**—A celebrated Belgian fruit which has become very popular in this country. The fruit is very large, bright, glossy crimson; flesh very firm, sweet and juicy. It is very productive and continues a long time in bearing. Extra, 50 cts per doz., \$1.50 per 100.
- WILSON'S ALBANY.**—A very prolific and profitable fruit. 25 cts. per doz., \$1 per 100.

A WORD FOR THE BLACKBERRY.

Well might the poet Thomson say, "The rolling year is full of Thee," and in another place "He spreads a common feast for all that live."—For no sooner has one delicious berry blossomed, ripened and gone, than another takes its place. And in its season comes the Blackberry, widely disseminated throughout our blessed country, a great luxury for man, and also food for the robin; who in God's good providence has scattered the seeds of this valuable fruit broad cast throughout the land. We can all have them close at hand by following the simple directions I give, which, as in strawberry culture is the result of my experience.

If you have a spare strip of ground in your garden, along an east and west fence, plant on the north side of it. Or, as next best, select the east side of a north and south fence. The ground should be drained; if not drained, elevate the bed about six inches. Set posts in the ground, in a line with the fence, and three feet from it. Let the posts

be eight or ten feet apart, two feet in the ground, and two and a half from ground to top of post. Nail five-inch board lengthwise on top of the post, then nail slats from top of each post, across to the fence and fasten there. Set the roots, one in a place, five feet apart, two feet from the fence. Cover if possible the whole space between the posts and fence with rotten logs, or chips; if with chips, one foot deep, leaving a space of a foot in diameter around each stalk. The stalk will send up one or two shoots. Let them stand until they have attained the height of eighteen inches. Select the most vigorous stalk and cut the other off near the ground.

When this remaining stalk is three feet high, pinch off the terminal or top bud. The stalk will then send out laterals. In the second year several shoots will make their appearance. Let these attain a height of eighteen inches, and again remove all shoots, but the most vigorous. And when it attains the height of four feet, nip off the top bud, and the stalk will send out laterals. The bush will assume the appearance of a small tree, the stalk being from three to five inches in circumference.

By the third year the roots will become strong enough to support two new shoots; that will make their appearance, when the chip or log covering is removed, so as to make two or three openings between the first plants set out. After the third year you will then have about four bushes for every five feet; let them not increase above that number. If the third year is a propitious one, there being plenty of rain in August and September: you will gather a crop of blackberries, that will pay for all your trouble, if the stalks would never produce another berry.

For two or three weeks after the fruiting season is over, cut off all the old canes close to the ground. This is done most expeditiously, with a pair of shears, such as sheep growers use for trimming the hoofs of sheep—and although it is foreign to the subject, I will here say, you will find these shears very convenient for pruning the small branches of trees.

Reader, have you ever in childhood gathered wild blackberries? If you have you will remember that you gathered the most, the largest, and the best berries, where the bird had dropped the berry seed in a location best adapted to the production of the fruit. Perhaps on the north or east side of the forest, where the trees gave the bushes a partial shade. Or along the slopes of deep ravines, or in the fence corners, where the bush had for a part of the day, some larger bush or tree to shield it from the scorching sun-beams; or beside a stone heap, where the roots could find a steady moisture. And last and best of all locations, you found the richest, and the best, between some old decaying logs, especially if they were near some partial shade. But perhaps you

will remember, having seen here and there a bush standing out in the open field; and that the berries gathered there were small tough, and bitter; more like a persimmon to the taste, than like a blackberry. I for one remember these things; and this is why I have recommended planting where the bushes have a partial shade, and a covering of old logs or chips. I have now a row of Lawton Blackberries, one hundred and fifty feet in length. I planted them on the north side of a fence. They have given each year since the second from planting, nine years ago, in the favorable seasons an abundant yield. Three years ago, after using them for supper every day for a family of four persons, during their season and after canning many, I sold berries to the amount of thirteen dollars from that narrow strip of ground, which for any other crop, would not have produced the value of three dollars. And it is no small luxury to have them on your table daily, fresh and *dead ripe*, for six or eight weeks for they are in bearing a long time. Many people who undertake to raise blackberries, gather them before they are ripe, as soon as they turn black. Now there is as much difference between a blackberry picked, as soon as the color is turned; and a ripe one, as there is between a green and ripe peach. They grow from half to a third after the color is turned, and are not ripe, until they will fall from the bush, as soon as touched; and some people who have blackberry bushes, hardly know what a *ripe* berry is. And you will often hear the remark, "I do not like blackberries, they are so sour." Sour, because they are not *ripe*.

Do not pay agents an extravagant price for blackberry roots. In this vicinity—Summit County, Ohio,—the Lawton can be obtained for a dollar a hundred.

Below see description of different varieties.

B. M. Watson, of the Old Colony Nurseries, Plymouth, Mass., recommends the following kinds, with description of rare qualities &c.:

BLACKBERRIES.

"KITANINNY.—A new early blackberry, worthy of unqualified praise. It is hardy, vigorous, and enormously productive. The fruit is of unsurpassed flavor, ripening several weeks before the Lawton Extra.

LAWTON OR NEW ROCHELLE.—Well-known fruit of great value. One of the best late sorts, enormously productive.

LOVETT OR DORCHESTER.—V very black, handsome berry, of the highest flavor. Very sweet and delicious.

LOW BUSH.—This fine fruit, ripening as it does before any of the other varieties, should be in every garden. Excellent for Wine.

LOW BUSH IMPROVED.—A fine variety of the above, fine, very sweet.

WILSON.—A new and famous fruit, now extensively planted for fruit. It is no doubt one of the best blackberries in cultivation, and should be in all gardens. The fruit is earlier than the Lawton, and of the highest excellence. Extra."

HOW TO RAISE A LARGE CROP
OF
STRAWBERRIES.



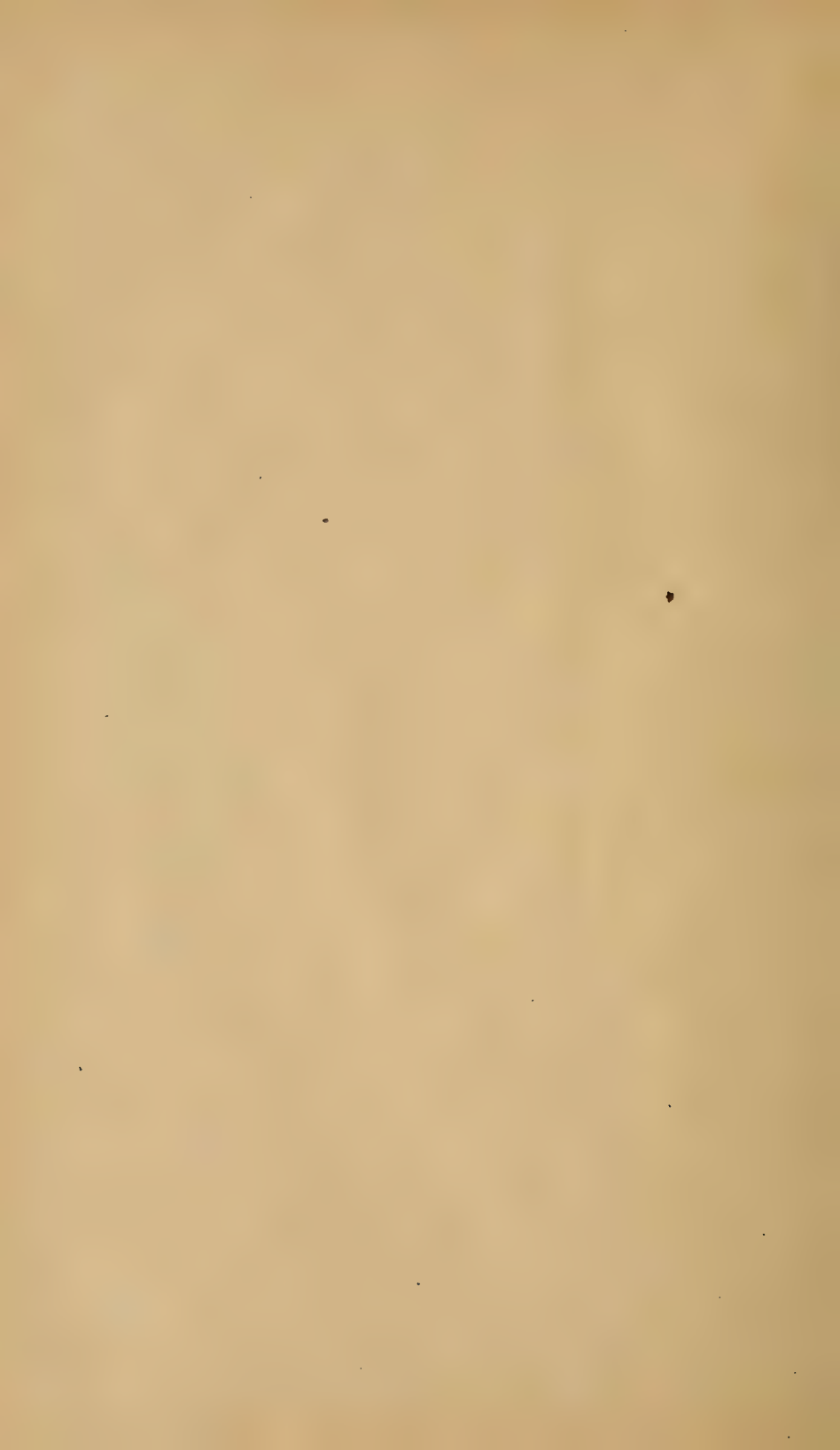
BY J. C. SNIDER,
TALLMADGE, SUMMIT CO., O.

MODE OF CULTURE AND DESCRIPTION OF VARIETIES
SENT TO ANY ADDRESS ON THE RECEIPT
OF FIFTY CENTS.



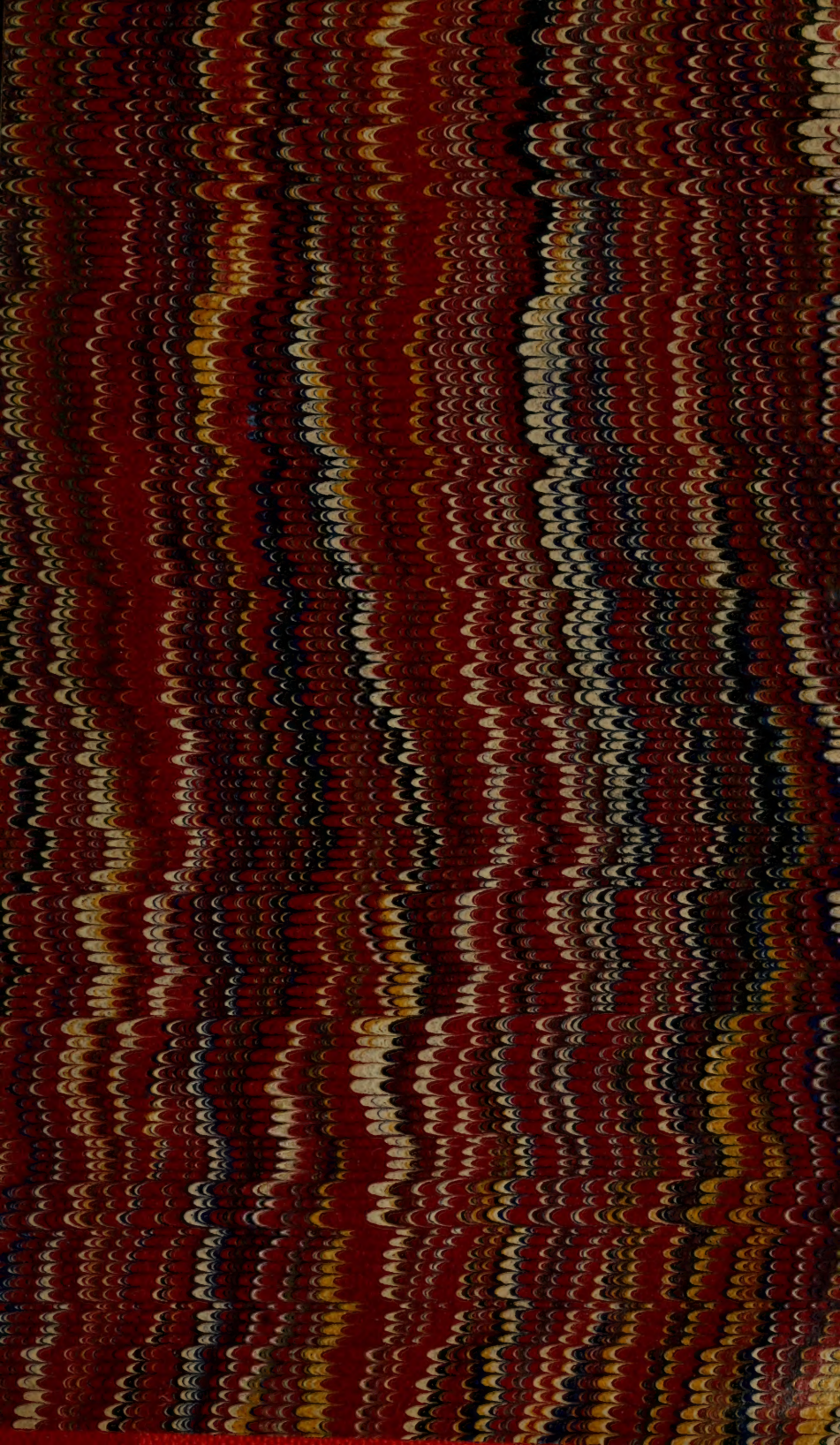




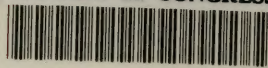








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